

Summary of Results for the South Carolina Teacher Exit Survey from the 2021-2022 Pilot Administration

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Executive Summary

Teacher turnover has profound implications for the capacity of the state's many small school districts and their ability to serve students effectively and equitably. Based on data collected for CERRA's most recent SC Annual Educator Supply and Demand reporting update in February (Garrett, 2022), there were more than 1,100 vacant positions to be filled in the state, based on responses from 74 of the 79 districts. While knowing *what* the number of vacancies is offers a helpful data point, perhaps more important to addressing some specific policy and strategic needs is to gain a more nuanced understanding of *why* educators are making the decisions they make. SC-TEACHER's second pilot administration of the SC Teacher Exit Survey in spring 2022 yielded insights directly from teachers in the state about these whys regarding whether they stay in, move from, or leave the teaching profession.

Connection with communities. Forty-three percent of the departing teachers reported they will teach in another school district next year. Convenience of job location/moving was most often cited as the single most important reason for leaving. This data point warrants particular attention as it is often overshadowed by "teachers leaving districts" when in fact they continue to fill teaching positions in the state. While district departures do indeed cause voids, there is also their filling vacancies elsewhere that deserves acknowledgement in the complex story of teacher turnover.

Challenges with meeting increasing student needs through the pandemic. When asked to indicate importance among multiple reasons for leaving, school discipline problems during the most recent school year were indicated with the greatest frequency where 44% of teachers indicated this as very or extremely important. This was a significant increase from the 2021 results where 21% cited school discipline problems of major importance for departure. This challenge may reflect the aftermath of the COVID-19 pandemic with reacclimating students to in-person instruction and addressing continued mental health needs.

COVID-related concerns about reaching all students and lack of support from the local school board were important concerns for about a third of the teachers. Items related to workload associated with and preparation for online and hybrid instruction were reported to be of less importance for teacher departures in 2022 than in 2021. This likely reflects changes in expectations of teachers to provide this type of instruction from early in the COVID-19 pandemic.

Desire for supportive leadership. Administrative concerns were a key factor for teachers who left for a teaching position in another school district, which remained consistent with the 2021 results. The top reason cited by teachers making a lateral move was administrative leadership/vision in their new school district. Teachers making lateral moves also reported lower effectiveness ratings of school leaders compared to those who were not moving to another teaching position. Higher salaries were cited by 80% of those who were not moving to another teaching position as important factors in consideration of a return to teaching. COVID-related reasons of concern for reaching all students, the health and safety of themselves and of family members, and challenges with workload associated with online/hybrid instruction were more prevalent among lateral movers than others.

Teachers with less experience tend to leave their positions because of job location or moving with greater frequency than teachers with more experience. Less experienced teachers also reported

greater levels of emotional distress from their work compared to more experienced teachers. In consideration of COVID-related reasons for leaving, more experienced teachers indicated concerns about both their own and their family members' health as important considerations more frequently than teachers with less experience.

Introduction

The teacher shortage is real, large, and growing, with schools in high-poverty or other underserved communities suffering the most from the shortage of credentialed teachers (Garcia & Weiss, 2019). This national pattern places South Carolina – along with other states in our region with high proportions of rural and low-income communities – at particular risk for shortages.

Much of the policy response to teacher shortages focuses on educator recruitment. Related programs across the state are pragmatic and necessary to ensure our constitutional mandate for "maintenance and support of a system of free public schools" is met. However, the driving factor of teacher shortages is high teacher attrition (Sutcher et al., 2019).

The South Carolina Teacher Exit Survey and this report explore the data and dynamics behind this challenge for our public school districts, with an eye toward informing the policies and practices enacted by state and local leaders. The balance of the introductory section includes a research review and information about the survey to contextualize findings. Subsequent sections of the report explore results from the survey in-depth, and a conclusion that addresses implications for consideration by policymakers and education leaders.

Context for the SC Teacher Exit Survey Data

This report unpacks reasons why South Carolina teachers, specifically, elect to stay, move to a teaching position elsewhere, or leave the teaching profession entirely. Yet it is important to place these findings in the context of national research to understand where our state's unique challenges – and potential solutions for state and local policy – may lie.

A review of national research on teacher attrition finds a range of factors influence decisions to stay or leave. Teacher turnover is closely associated with job dissatisfaction and pursuing other jobs (Ingersoll, 2001). Darling-Hammond (2003) finds that multiple factors within schools mattered for retention of teachers, including salaries, class size, teaching load, availability of materials, teacher participation in decision-making, strong and supportive instructional leadership from principals, and collegial learning opportunities. Several consistently rise to the top of these lists of factors, which are explored in particular depth in this report.

Leadership practices and supports for teachers. School administration plays an important role in teacher retention. Specifically, support from the principal, in terms of communicating expectations and maintaining order in the school, was a protective factor against teacher turnover, and increased administrative support reduced the probability that teachers leave or switch schools (Boyd et al., 2010; Kukla-Acevedo, 2009). Similarly, Carver-Thomas and Darling-Hammond (2019) indicate that lack of administrative support was one of the factors associated with high teacher turnover rates.

Influences beyond the school building. In addition to the factors above, student socioeconomic status (SES), parent and student cooperation, and technology access made statistically significant contributions to teachers' plans to stay or leave (Hughes, 2012; Loeb et al., 2005). Furthermore, several national polls conducted during the 2020-21 academic year indicated 20-47% of teachers were considering quitting or retiring early due to COVID-related issues (Antonucci, 2021).

Experience of teachers themselves. Attrition rates are much higher for new teachers (i.e., in their first year of practice) (Loeb et al., 2005). These teachers may have increased stress and fewer strategies to respond to challenges, fueling higher rates of departure.

Data Collection and Methodology for the SC Teacher Exit Survey

All SC teachers currently undergo an exit interview designed by the school districts that lacks consistency across the state. These exit interviews are often conducted in-person with their supervisor where teachers may not feel comfortable to share information about their decision to leave their position, particularly if related to school/district administration. The goal of this study was to pilot a survey with a sample of exiting teachers to provide initial insight on their reasons for leaving. An initial pilot administration of the survey was conducted with departing teachers from five school districts at the end of the 2020-2021 academic year.

Members of the research team, with input from school district partners, developed the SC Teacher Exit Survey. This survey was inspired by the Teacher Follow-Up Survey Questionnaire for Former Teachers to the Schools and Staffing Survey through the National Center of Education Statistics (2012). In addition to reasons for leaving from the national survey, we also addressed reasons related to the COVID-19 pandemic. The survey also included a set of items on the effectiveness of principals and school leaders on various aspects of school leadership. In addition, items from the emotional exhaustion subscale of the Maslach Burnout Inventory (Iwanicki & Schwab, 1981) were included to address the degree to which teachers experienced aspects of job-related emotional distress – particularly critical given what we know of national evidence about the toll of COVID on increased job-related stress and subsequent attrition. The survey was distributed to 754 exiting teachers from a convenience sample of ten school districts in the spring of the 2021-2022 school year with 572 completing the survey (response rate = 76%).

Data Analysis

Descriptive analysis was conducted for the sample of departing teachers that completed the survey. Contextual characteristics from demographic questions were summarized. Items were organized in sets with five-point Likert-type response scales. The percentage of responses within each response category were calculated for all items in each item set. Results are displayed in charts ordered by the percentage responding to the upper two response scale categories. Results from the upper two response scale categories from the various item sets were also examined by teachers who were making lateral versus non-lateral moves and by teachers with relatively less (five years or fewer) versus more (greater than five years) teaching experience.

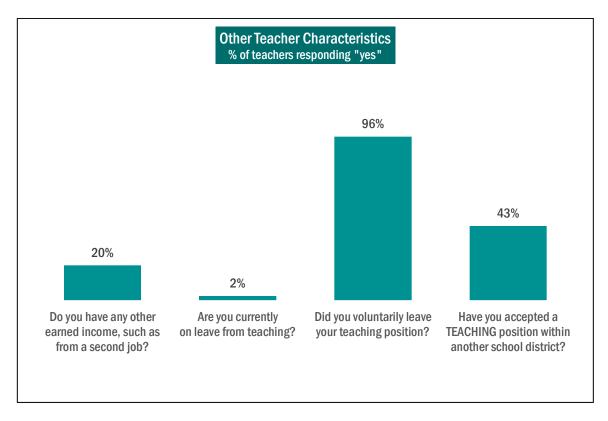
Overall Survey Results

Contextual Characteristics of the Sample

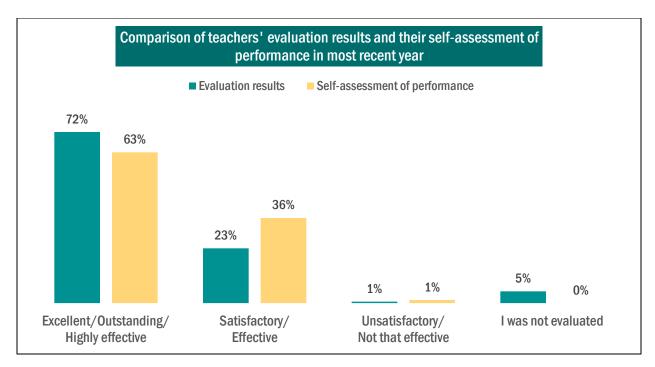
Teachers reported the number of years that they worked at their current school and the total number of years they worked as a certified teacher. Teachers had a mean of about seven years at their current school and 14 years total with substantial variation for both. Teachers' years at their current school ranged from 0 to 40 with a median of four, while teachers' total years of experience ranged from 0 to 50 with a median of 11.

Teachers' Years of Experience	Min	Median	Max	Mean	Std Dev	N
Years at most recent school	0	4	40	6.8	6.7	571
Total years as a certified teacher	0	11	50	13.7	10.5	572

The figure below shows results for information requested on teacher characteristics. A fifth of teachers (20%) reported an income source in addition to teaching. Very few teachers were out on leave (maternity or paternity, disability, or other). The vast majority of teachers left their positions voluntarily. Forty-three percent of teachers accepted a teaching position with another school district for the 2022-2023 school year.

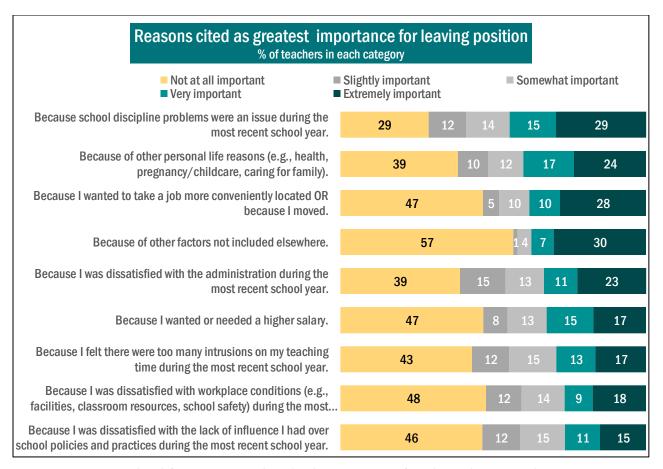


Teachers were asked to provide ratings of their evaluation results from the most recent school year. They were also asked to provide a self-assessment of their performance for the same timeframe. The figure below provides a summary of responses to both questions. Teachers tended to rate themselves in the top category at a lower rate and in the middle category at a higher rate than their performance rating as evaluated by school administrators.



Reasons for Leaving Position

Teachers were asked about a variety of reasons (24 total) for deciding to leave their current teaching position. Reasons were categorized as personal matters, career-oriented matters, classroom factors, school factors, and student assessment factors. Teachers were asked about the importance of each reason in their decision. The figure below displays results for seven reasons that were cited by more than 25% of the teachers as very or extremely important to their decision to leave their current teaching position. Teachers most frequently cited school discipline problems as an issue during the most recent school year (44% indicated very or extremely important). Notably, this reason was cited as such by just 21% of teachers in the 2021 results. This challenge may reflect an aftermath of the COVID-19 pandemic with reacclimating students to in-person instruction and addressing continued mental health needs. Other personal reasons, taking a job more conveniently located or moving, and other factors not included elsewhere on the survey had the next greatest relative importance for teachers leaving their positions (41%, 38%, and 37% indicated very or extremely important, respectively). Several reasons connected to teacher working conditions were cited as important reasons for departures at relatively high rates.



Notes. Reasons are ordered from greatest to least by the percentage of teachers who reported *very important* plus *extremely important*. Between 202 and 456 teachers provided responses to these items.

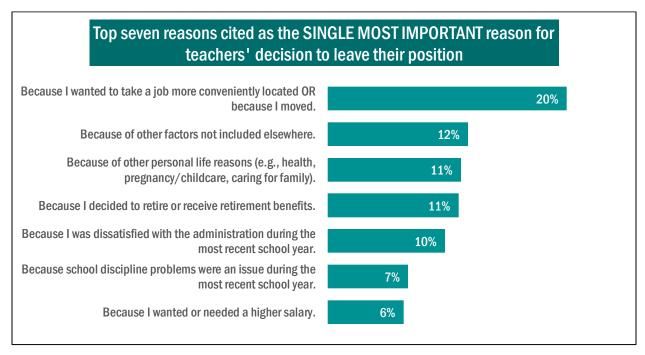
Open-ended responses from 166 teachers who reported "Because of other factors not reported elsewhere" were qualitatively coded to identify patterns in responses. The table below presents response codes identified along with the frequency of responses within each code. Responses related to dissatisfaction with leadership (school, district, or general) were reported by 21% of those who responded.

Other factors reported by teachers as important in the decision to leave their						
teaching position						
Response Code	Number	Percentage				
Lack of support	16	10%				
Dissatisfaction with school leadership	15	9%				
Dissatisfaction with district leadership	15	9%				
Safety/discipline	14	8%				
Lateral move/relocating/retiring	14	8%				
Workload/unrealistic expectations	13	8%				
Pay/compensation	12	7%				
School climate/working conditions	9	5%				
Special education	7	4%				
Lack of opportunity or advancement	6	4%				
Mental health/stress/burnout	5	3%				
Testing	5	3%				
Dissatisfaction with leadership (general)	5	3%				
Politics	5	3%				
Family responsibilities	4	2%				
General response	4	2%				
Other	17	10%				
Total Responses	166	100%				

Note. The sum of individual percentages does not equal 100% due to rounding.

Teachers were also asked to specify the single most important reason influencing their decision among the 24 reasons. The seven reasons with most responses are provided in the figure below. The top single most important reason was wanting a more conveniently located job or moving, cited by 20% of teachers. The following items were not identified by any teacher as the single most important reason for their decision:

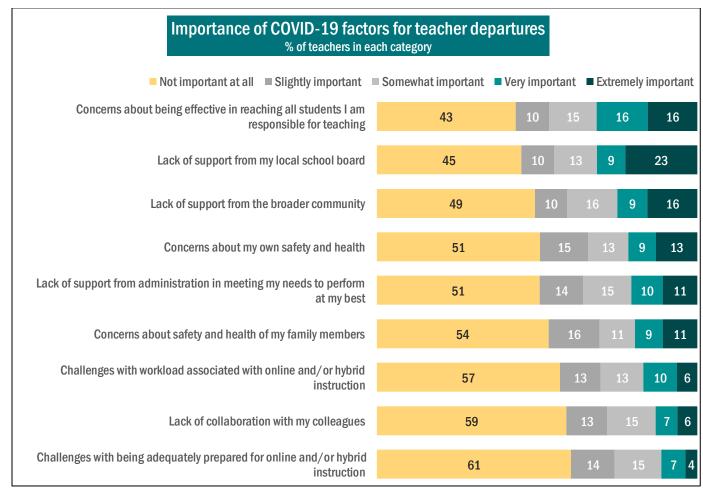
- Because I needed better benefits than I received at my school.
- Because I decided to take courses to improve career opportunities OUTSIDE the field of education.
- Because I did not have enough autonomy over my classroom during the most recent school year.
- Because I felt there were too many intrusions on my teaching time during the most recent school year.
- Because I was dissatisfied with how some of my compensation, benefits, or rewards were tied to the performance of my students during the most recent school year.
- Because I was dissatisfied with the support I received for preparing my students for student assessment during the most recent school year.



Notes. All other reasons combined account for the remaining 22% of responses with each reason ranging from 0% to 4% of all responses. A total of 511 teachers provided a response to this item.

COVID-Related Reasons for Leaving Position

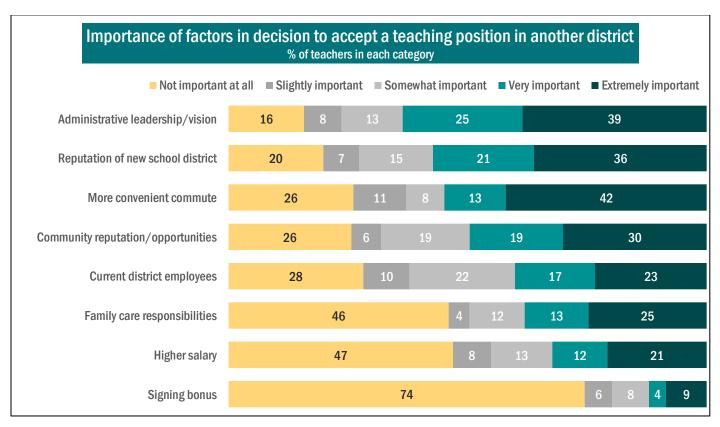
Teachers were asked to rate the importance of reasons related to the COVID-19 pandemic in their decision to leave their teaching position. Concerns about being able to reach all students they are responsible for teaching and lack of support from their school board were cited as the most important reasons with 32% of teachers indicating these were very or extremely important for both items. Lack of support from the broader community was also a top reason cited with 25% of teachers expressing it as very or extremely important. Items related to workload associated with and preparation for online and hybrid instruction were reported to be of less importance for teacher departures in 2022 than in 2021. Challenges with workload associated with online and/or hybrid instruction was cited as very or extremely important by 32% in 2021 and 16% in 2022. Challenges with being adequately prepared for online and/or hybrid instruction was cited as very or extremely important by 26% in 2021 and 11% in 2022. This likely reflects changes in expectations of teachers to provide this type of instruction from early in the COVID-19 pandemic. Most school districts returned to in-person learning and/or provided entirely virtual options for their students in the 2021-2022 school year. Individual teachers were not expected to provide hybrid instruction as frequently as they were early in the COVID-19 pandemic.



Notes. Reasons are ordered from greatest to least by the percentage of teachers who reported *very important* plus *extremely important.* Between 531 and 536 teachers provided responses to these items.

Factors for Lateral Movers

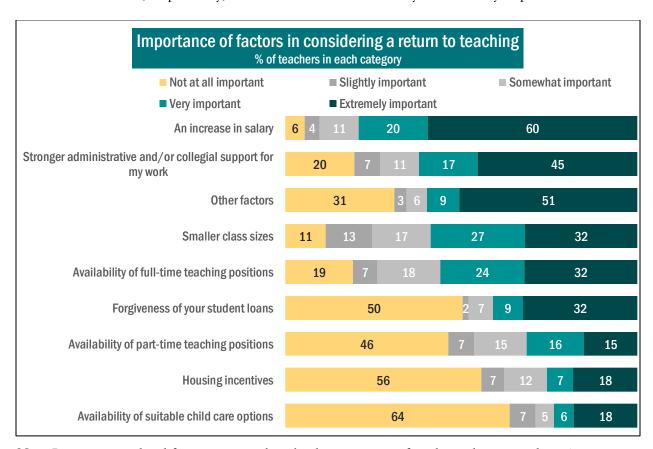
Teachers who accepted a position with another school district for the next school year, referred to as lateral movers, were asked about the importance that various factors played in their decision. The reason cited most often was administrative leadership/vision where 64% of teachers reported this as a very or extremely important factor in their decision. Reputation of the new school district was also an important factor with 57% of teachers indicating it as very or extremely important. Having a more convenient commute was another important factor cited as very or extremely important by 55% of teachers. Signing bonus was seldomly reported as a factor in these teachers' decisions with 74% indicating it was not important at all.



Notes. Reasons are ordered from greatest to least by the percentage of teachers who reported *very important* plus *extremely important*. Of the 246 teachers who indicated they were making a lateral move, between 223 and 228 teachers provided responses to these items.

Factors for Teaching in the Future

When those who were not taking a teaching position in another district were asked if they would consider returning to a teaching position, 37% said yes, 22% said no, and 41% said maybe. These teachers were then asked about the importance of various factors in consideration of their decision to return to a teaching position in the future. Data were summarized for the subset of teachers who indicated they were not leaving their current position to teach in another district, referred to as non-lateral movers. The reason cited as greatest importance was an increase in salary with 80% of teachers stating this was very or extremely important. While higher salary was also reported as the top reason in 2021, it was cited of major importance by 64% teachers. Four additional reasons noted with relatively high frequency of importance include stronger administrative/collegial support, other factors, smaller class sizes, and availability of full-time teaching positions, where 62%, 60%, 59%, and 56% of teachers, respectively, indicated these reasons as very or extremely important.



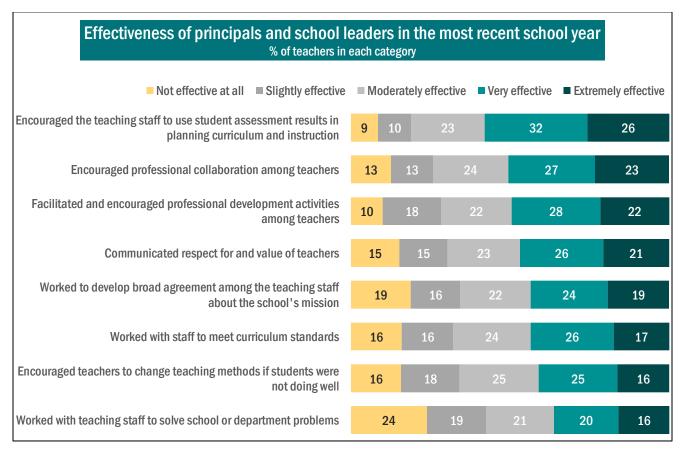
Notes. Reasons are ordered from greatest to least by the percentage of teachers who reported *very important* plus *extremely important*. Of the 322 teachers who indicated they were not making a lateral move, between 87 and 235 teachers provided responses to these items.

Open-ended responses from 68 non-lateral movers who reported "other factors" as important in considering a return to teaching were qualitatively coded to identify patterns in responses. The table below presents response codes identified along with the frequency of responses within each code. Responses related to safety/discipline were reported by 18% of respondents to this question.

Other factors reported by non-lateral movers that would be important in considering a return to a teaching position						
Response Category	Number	Percentage				
Safety/discipline	12	18%				
More support	7	10%				
Autonomy	7	10%				
Opportunity or advancement	6	9%				
School climate/working conditions	5	7%				
Leadership	5	7%				
Workload/more realistic expectations	4	6%				
Pay/compensation/benefits	4	6%				
Special education	3	4%				
Remote work	3	4%				
Better location	3	4%				
Other	9	13%				
Total Responses	68	100%				

Principal/School Leaders Effectiveness

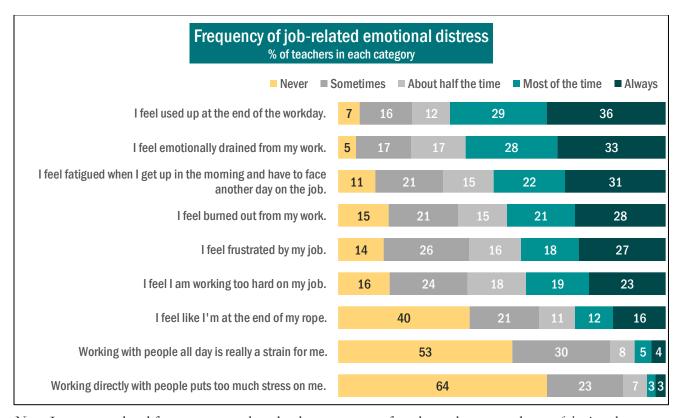
Teachers were asked to provide ratings of effectiveness of their principal/school leaders on various aspects of school leadership during the most recent school year. The percentage of teachers rating school leaders as very or extremely effective ranged from 36% to 58% across the items. The highest rating was for encouraging teaching staff to use student assessment results in planning curriculum and instruction, while the lowest rating was for working with teaching staff to solve school or department problems. Patterns were consistent with results from the 2021 survey administration.



Notes. Items are ordered from greatest to least by the percentage of teachers who reported *very effective* plus *extremely effective*. Between 538 and 540 teachers provided responses to these items.

Emotional Distress Items

Teachers were asked a series of items about work-related emotional distress. More than 60% of teachers reported that they mostly or always feel used up by the end of the workday and feel emotionally drained from their work. About half the teachers reported that they feel fatigued about going to work and that they feel burned out from their work most of the time or always. Very few teachers reported frequently feeling stress or strain related to working with people.



Notes. Items are ordered from greatest to least by the percentage of teachers who reported *most of the time* plus *always*. Between 545 and 547 teachers provided responses to these items.

Key Results by Lateral vs. Non-Lateral Movers

Analysis was conducted separately for teachers who indicated they accepted a teaching position at another school (referred to as *lateral movers*) and those who did not (referred to as *non-lateral movers*). In the sample, 246 teachers indicated they were making a lateral move and 322 teachers did not. When asked about the importance of various reasons for leaving, lateral movers cited "because I wanted to take a job more conveniently located OR because I moved" significantly more often than non-lateral movers (60% of lateral movers and 21% of non-lateral movers indicated very or extremely important).

Conversely, non-lateral movers reported the following reasons for leaving with substantially greater importance than lateral movers (% of non-lateral movers and % of lateral movers who indicated very or extremely important):

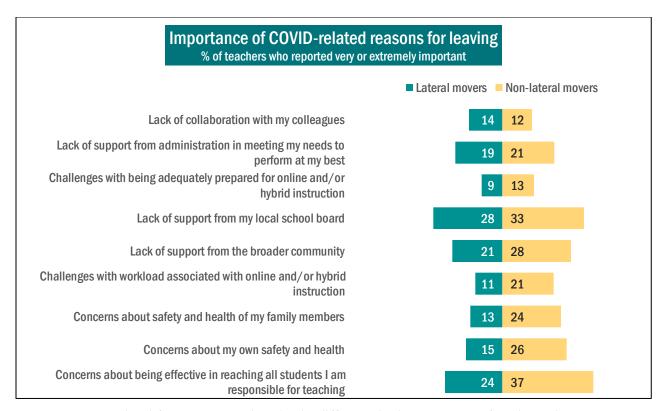
- Because I decided to retire or receive retirement benefits (31% and 3%).
- Because I decided to pursue a position outside the field of education (29% and 1%).
- Because I was dissatisfied with teaching as a career (34% and 8%).

Lateral movers more frequently reported wanting to take a job that was more conveniently located or moving as the **single most important** factor for leaving compared to non-lateral movers (38% vs. 7%). Non-lateral movers more often reported deciding to retire or receive retirement benefits as the **single most important** reason for leaving compared to lateral movers (19% vs. 1%).

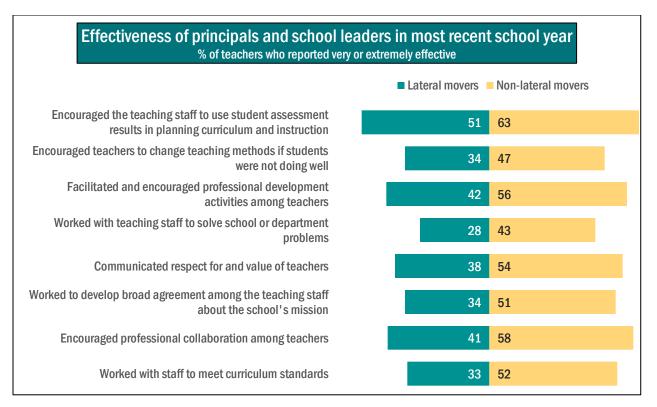
Relative to lateral movers, non-lateral movers more frequently cited COVID-related concerns about being effective in reaching all students, concerns about safety and health of their own and of their family members, and concerns of challenges with workload associated with online and/or hybrid instruction as important reasons for their decision to leave their teaching position (see figure on page 16).

Lateral movers rated performance of their principal/school leaders lower than non-lateral movers on all aspects, where working with staff to meet curriculum standards had the greatest difference (see figure on page 17).

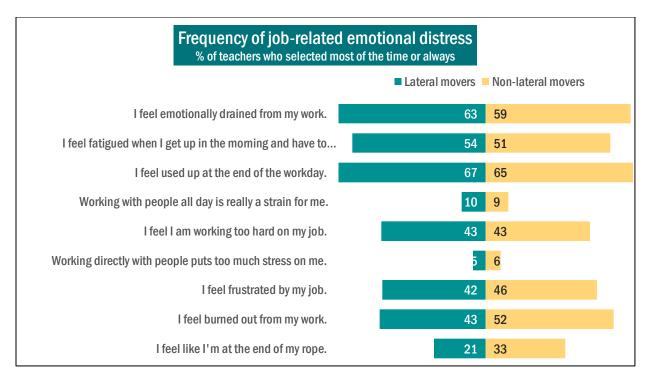
Results for the majority of emotional distress items did not differ substantially between lateral and non-lateral movers (see figure on page 18). Non-lateral movers reported that they feel burned out from their job and that they feel like they're at the end of their rope more often than lateral movers.



Notes. Items are ordered from greatest to least by the difference in the percentage of teachers who reported *very important* plus *extremely important* between lateral movers (those taking a teaching position in another school district) and non-lateral movers. Between 232-234 teachers who were lateral movers and 299-301 teachers who were non-lateral movers provided responses to these items.



Notes. Items are ordered from greatest to least by the difference in the percentage of teachers who reported *very important* plus *extremely important* between lateral movers (those taking a teaching position in another school district) and non-lateral movers. Between 236-237 teachers who were lateral movers and 302-304 teachers who were non-lateral movers provided responses to these items.



Notes. Items are ordered from greatest to least by the difference in the percentage of teachers who reported *most of the time* plus *always* between lateral movers (those taking a teaching position in another school district) and non-lateral movers. Two hundred thirty-seven teachers who were lateral movers and 309-310 teachers who were non-lateral movers provided responses to these items.

Key Results by Less vs More Teaching Experience

Analysis was conducted separately for teachers who indicated they had five years or less total teaching experience (referred to as *less experienced*) and those who had more than five years total teaching experience (referred to as *more experienced*). In the sample, 171 teachers had five or fewer total years of teaching experience and 401 teachers had more than five total years of teaching experience.

When asked about the importance of various reasons for leaving, less experienced teachers reported the following reasons relatively more often than more experienced teachers (% of less experienced teachers and % of more experienced teachers who indicated very or extremely important):

- Because I was dissatisfied with the support I received for preparing my students for student assessment during the most recent school year (22% and 8%).
- Because I wanted to take a job more conveniently located OR because I moved (48% and 35%).
- Because I wanted or needed a higher salary (42% and 29%).

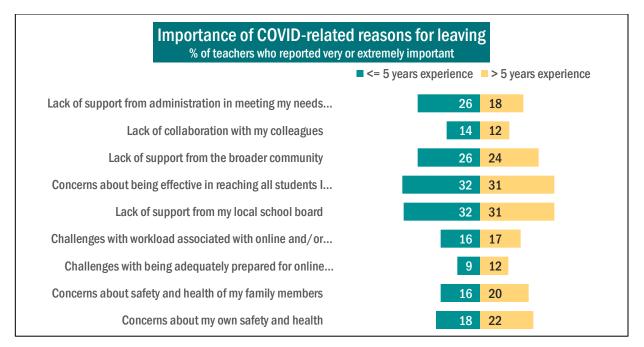
Conversely, more experienced teachers reported "because I decided to retire or receive retirement benefits" as a reason for leaving with significantly greater importance than less experienced teachers (25% of teachers with more than five years' experience and 2% of teachers with five or fewer years' experience indicated very or extremely important).

Those with less teaching experience more frequently reported wanting a more conveniently located job or moving as the **single most important** factor for leaving compared to more experienced teachers (28% vs. 18%). More experienced teachers reported deciding to retire or receive retirement benefits as the **single most important** reason for leaving with greater frequency than less experienced teachers (16% vs. 1%).

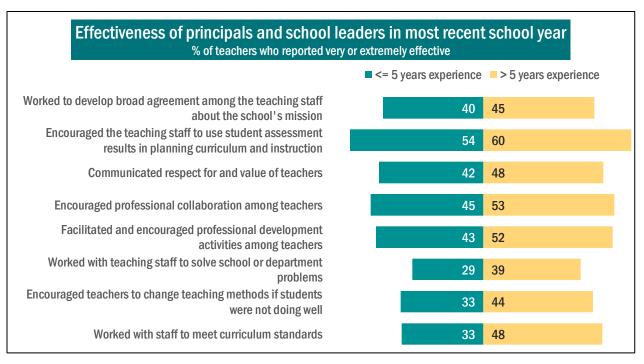
More experienced teachers cited COVID-related concerns about health and safety of their own and of family members as important reasons for their decision to leave their position at higher rates than less experienced teachers. Relative to more experienced teachers, less experienced teachers more frequently reported lack of support from administration in meeting their needs to perform their best (see figure on page 20).

More experienced teachers rated performance of their principal/school leaders lower than less experienced teachers on all aspects where working with staff to meet curriculum standards had the greatest difference (see figure on page 21).

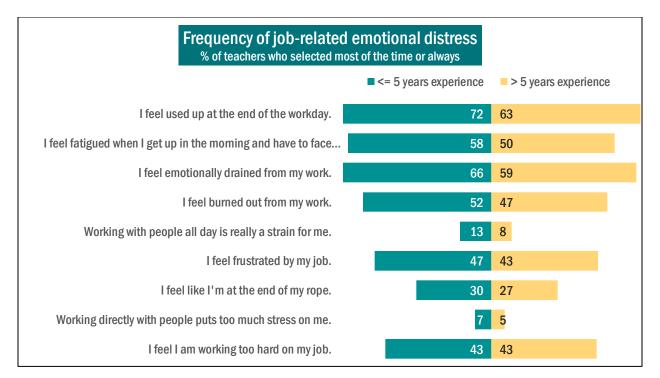
Less experienced teachers more often reported feelings of emotional distress from their work compared to more experienced teachers (see figure on page 22).



Notes. Items are ordered from greatest to least by the difference in the percentage of teachers who reported *very important* plus *extremely important* between teachers with less teaching experience (five years or fewer) and more teaching experience (more than five years). Between 158-159 teachers with five or fewer years' experience and 366-371 teachers with more than five years' experience provided responses to these items.



Notes. Items are ordered from greatest to least by the difference in the percentage of teachers who reported *very important* plus *extremely* important between teachers with less teaching experience (five years or fewer) and more teaching experience (more than five years). Between 161-162 teachers with five or fewer years' experience and 371-372 teachers with more than five years' experience provided responses to these items.



Notes. Items are ordered from greatest to least by the difference in the percentage of teachers who reported *most of the time* plus *always* between teachers with less teaching experience (five years or fewer) and more teaching experience (more than five years). Between 164-165 teachers with five or fewer years' experience and 374-376 teachers with more than five years' experience provided responses to these items.

References

- Antonucci, M. (2021, April 28). Analysis: Last year's polls showed teachers were thinking about quitting. This year, evidence suggests COVID-19 had little effect on their job retention. The 74 Million.

 https://www.the74million.org/article/analysis-last-years-polls-showed-teachers-were-thinking-about-quitting-this-year-evidence-suggests-covid-19-had-little-effect-on-their-job-retention/
- Boyd, D., Grossman, P., Loeb, S., & Wyckoff, J. (2010). The influence of school administrators on teacher retention decisions. *American Educational Research Journal*, 48(2), 303-333. DOI: https://doi.org/10.3102/0002831210380788
- Carver-Thomas, D., & Darling-Hammond, L. (2019). The trouble with teacher turnover: How teacher attrition affects students and schools. *Education Policy Analysis Archives, 27*(36). DOI: http://dx.doi.org/10.14507/ epaa.27.3699
- Darling-Hammond, L. (2003). Keeping good teachers: Why it matters and what leaders can do. *Educational Leadership*, 60(8), 6-13.
- Garcia, E., & Weiss, E. (2019). The teacher shortage is real, large and growing, and worse than we thought. Economic Policy Institute. https://www.epi.org/publication/the-teacher-shortage-is-real-large-and-growing-and-worse-than-we-thought-the-first-report-in-the-perfect-storm-in-the-teacher-labor-market-series/
- Garrett, J. (2022, February). South Carolina Annual Educator Supply & Demand Report. CERRA. Retrieved from https://www.cerra.org/supply-and-demand.html
- Hughes, G. D. (2012). Teacher retention: Teacher characteristics, school characteristics, organizational characteristics, and teacher efficacy. *The Journal of Educational Research*. 105 (4), 245-255. DOI: https://doi.org/10.1080/00220671.2011.584922
- Ingersoll, R. M. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal*, 38(3), 499-534.
- Iwanicki, E. F., & Schwab, R. L. (1981). A cross validation study of the Maslach Burnout Inventory. *Educational and Psychological Measurement, 41*(4), 1167–1174.
- Kukla-Acevedo, S. (2009). Leavers, movers, and stayers: The role of workplace conditions in teacher mobility decisions. *The Journal of Educational Research*, 102(6), 443-452. DOI: https://doi.org/10.3200/JOER.102.6.443-452
- Loeb, S., Darling-Hammond, L., & Luczak, J. (2005). How teaching conditions predict teacher turnover. *Peabody Journal of Education*, 80(3), 44-70.
- Maslach, C., & Jackson, S.E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, 2, 99-113.

- National Center for Education Statistics. (2012). SASS, Schools and Staffing Survey, Teacher Follow-Up Survey, Questionnaire for Former Teachers. [Washington, DC] (555 New Jersey Ave., NW, Washington 20208): U.S. Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics. Retrieved from: https://nces.ed.gov/surveys/sass/pdf/1213/tfs-2.pdf
- Sutcher, L., Darling-Hammond, L., Carver-Thomas, D. (2019). Understanding teacher shortages: An analysis of teacher supply and demand in the U.S. *Education Policy Analysis Archives*, 27(35). DOI: http://dx.doi.org/10.14507/epaa.27.3696